

To: Nancy A. Nord[nnord@ofwlaw.com]
Cc: Janjic, Ksenija[Janjic.Ksenija@epa.gov]; McQueen, Jacqueline[McQueen.Jacqueline@epa.gov]; Villamizar, Nicole[Villamizar.Nicole@epa.gov]; Elliot Belilos[ebelilos@ofwlaw.com]
From: Carusiello, Chris
Sent: Wed 6/15/2016 6:55:57 PM
Subject: References for Meeting Materials March 22, 2016

Hi Nancy,

It was good seeing you again at Ecore in York, PA. In writing up some of the background for the research protocol in the study, we wanted to site some of the useful information we received from the meeting materials we received in March from the initial visit with the Synthetic Turf Council, Safe Fields Alliance, Recycled Rubber Council, and the Institute of Scrap Recycling Industries.

We were wondering if that information would be fine to quote, and are asking you since the information comes from multiple sections of the meeting materials. Please see below the section that we would like to use and the citation. Please let us know, if at all possible, by the end of this week if anything does not sound right in our write-up, or if there is anything that needs to be better represented.

Thank you,

Chris Carusiello

There are between 12,000 and 13,000 synthetic turf sports fields in the U.S., with approximately 1,200 – 1,500 new installations each year (STC et al., 2016). It is estimated that 95% of the fields utilize recycled rubber infill exclusively or in a mixture with sand or alternative infills (STC et al., 2016). Current generation synthetic turf fields are typically constructed using a gravel/stone base to allow drainage and a multi-layered polypropylene and urethane backing material with polyethylene fiber blades attached to the backing placed over the base. Sand or a sand/crumb rubber mix is often used as a lower layer infill material, with a top layer of infill material consisting of recycled tire crumb rubber, natural materials (such as ground coconut husk), ethylene propylene diene monomer (EPDM), or thermoplastic elastomers (TPE) granules

(STC et al., 2016). Sand may also be used in a mixture with tire crumb rubber infill in top layers in some installations. Recycled tire crumb rubber synthetic turf infill serves as ballast, support for the synthetic grass blades, and as cushioning for field users. Infill material selection and installation may also be designed to aid water drainage. As many as 20,000 recycled tires are used to produce the rubber used in a field (STC et al., 2016). Routine synthetic turf field maintenance includes brushing for infill redistribution, raking for infill decompaction, and sweeping for debris removal (STC et al., 2016). New infill material is sometimes added to existing fields to refresh or replace existing tire crumb rubber.

Citation:

STC et al. (2016). Information provided as part of an informational meeting between the U.S. EPA and representatives of the Synthetic Turf Council, Safe Fields Alliance, Recycled Rubber Council, and the Institute of Scrap Recycling Industries. Washington, D.C., March 26, 2016.

Chris Carusiello

U.S. EPA Office of Resource Conservation & Recovery

Industrial Materials Reuse Branch

Tel (703) 308-8757

Carusiello.Chris@epa.gov | [@EPAland](#)